IN THE CLAIMS

1. (Currently Amended) A wavelet inverse transform device comprising:

decoding object coefficient extracting means for extracting only coefficients necessary for decoding a specified area from wavelet transform coefficients; and

wavelet inverse transform means for inverse transforming said only coefficients of said specified area extracted from said decoding object coefficient extracting means;

wherein said decoding object coefficient extracting means extracts transform coefficients not only inside said specified area but also those outside said specified area.

2. (Original) The wavelet inverse transform device according to claim 1 further comprising:

decoding object are determining means for determining a decoding object area, said decoding object coefficient extracting means extracting coefficients necessary for decoding an area determined by said decoding object area determining means.

3. (Original) The wavelet inverse transform device according to claim 1 wherein said wavelet transform coefficients are made up of transform coefficients of a plurality of splitting levels and include transform coefficients inside of and on an outer rim side of each splitting level based specified area.

4. (Original) The wavelet inverse transform device according to claim 1 wherein transform coefficients on the outer rim side of the specified area extracted by said decoding object coefficient extracting means correspond to the number of impulse response of a filter used in said wavelet inverse transform means.

5. (Original) The wavelet inverse transform device according to claim 3 wherein said wavelet transform coefficients are obtained on hierarchically splitting a low range component of a plurality of splitting levels.

6. (Original) The wavelet inverse transform device according to claim 1 wherein, of transform coefficients generated by said wavelet inverse transform means, those in a valid range based on overlap holding processing are extracted.

7. (Original) The wavelet inverse transform device according to claim 6 wherein extraction of the coefficients in the valid range based on said overlap holding processing is performed from one level of the wavelet splitting to another.

8. (Currently Amended) A wavelet inverse transform method comprising:

a decoding object coefficient extracting step for extracting only coefficients necessary for decoding a specified area from wavelet transform coefficients; and

a wavelet inverse transform step for inverse transforming said only coefficients of said specified area extracted from said decoding object coefficient extracting means;

wherein said decoding object coefficient extracting step extracts transform coefficients not only inside said specified area but also those on an outer rim of said specified area.

9. (Currently Amended) A wavelet decoding device comprising:

entropy decoding means for entropy decoding an encoded bitstream, generated on wavelet inverse transforming a picture;

decoding object coefficient extracting means for extracting, from among wavelet transform coefficients obtained by said entropy decoding means, ~~those~~ only coefficients necessary for decoding a specified area; and

wavelet inverse transform means for inverse transforming ~~the~~ said only coefficients of said specified area extracted by said decoding object coefficient extracting means;

wherein said decoding object coefficient extracting means extracts transform coefficients not only inside said specified area but also those on an outer rim of said specified area.

10. (Original) The wavelet decoding device according to claim 9 further comprising:

dequantizing means to restore wavelet transform coefficients obtained by said entropy decoding means to restore wavelet transform coefficients, said decoding object coefficient

extracting means extracting coefficients necessary for decoding the specified area from among the wavelet transform coefficients obtained by said dequantizing means.

11. (Original) The wavelet decoding device according to claim 9 wherein decoding object area determining means for determining a decoding object area, said decoding object coefficient extracting means extracting coefficients necessary for decoding an area determined by said decoding object area determining means.

12. (Original) The wavelet decoding device according to claim 9 wherein said wavelet transform coefficients are made up of transform coefficients of a plurality of splitting levels and include transform coefficients inside of and on an outer rim side of each splitting level based specified area.

13. (Original) The wavelet decoding device according to claim 9 wherein transform coefficients on the outer rim side of the specified area extracted by said decoding object coefficient extracting means correspond to the number of impulse response of a filter used in said wavelet inverse transform means.

14. (Original) The wavelet inverse transform device according to claim 12 wherein said wavelet transform coefficients are obtained on hierarchically splitting a low range component of a plurality of splitting levels.

15. (Original) The wavelet inverse transform device according to claim 9 wherein, of transform coefficients generated by said wavelet inverse transform means, those in a valid range based on overlap holding processing are extracted.

16. (Original) The wavelet inverse transform device according to claim 15 wherein extraction of the coefficients in the valid range based on said overlap holding processing is performed from one level of the wavelet splitting to another.

17. (Currently Amended) A wavelet decoding method comprising:

an entropy decoding step for entropy decoding an encoded bitstream, generated on wavelet inverse transforming a picture;

a decoding object coefficient extracting step for extracting, from among wavelet transform coefficients obtained by said entropy decoding means, ~~those~~ only coefficients necessary for decoding a specified area; and

a wavelet inverse transform step for inverse transforming ~~the~~ said only coefficients of said specified area extracted by said decoding object coefficient extracting step;

wherein said decoding object coefficient extracting step extracts transform coefficients not only inside said specified area but also those on an outer rim of said specified area.

18. (Original) The wavelet decoding method according to claim 17 further comprising:

a dequantizing step of dequantizing the quantized coefficients obtained by said entropy decoding step, said decoding object coefficient extracting step extracting coefficients necessary for decoding the specified area from among the wavelet transform coefficients obtained by said dequantizing step.